

Agenda

- Overview of the Sustainable Water Infrastructure Project
- Overview of the Recycled Water Ordinance and Guidelines
- Cost Impacts for Developments



Sustainable Water Infrastructure Project





Importance of SWIP's Recycled Water

- Key component of 2018 Sustainable Water Master Plan
- Drought resilient water supply
- Alignment with California Water Code



State Permitting Requirements per Order No. R4-2021-0044 (RWQCB)

- Engineering Report
- Operations Optimization Plan
- Climate Change Adaptation and Mitigation Plan
- City adoption of enforceable rules and regulations



Recycled Water Ordinance SMMC 7.12.170









7.12.170.(b).4 - Non-Potable Recycled Water Applications

- Approved uses per California Code of Regulations Title 22
- Surface irrigation and dualplumbing applications









7.12.170.(b).8 - New Development

Any **NEW** structure with any:

- Plumbing fixture(s)
- Cooling tower(s), and/or
- New, enlarged, or relocated irrigation system, pond, or water feature

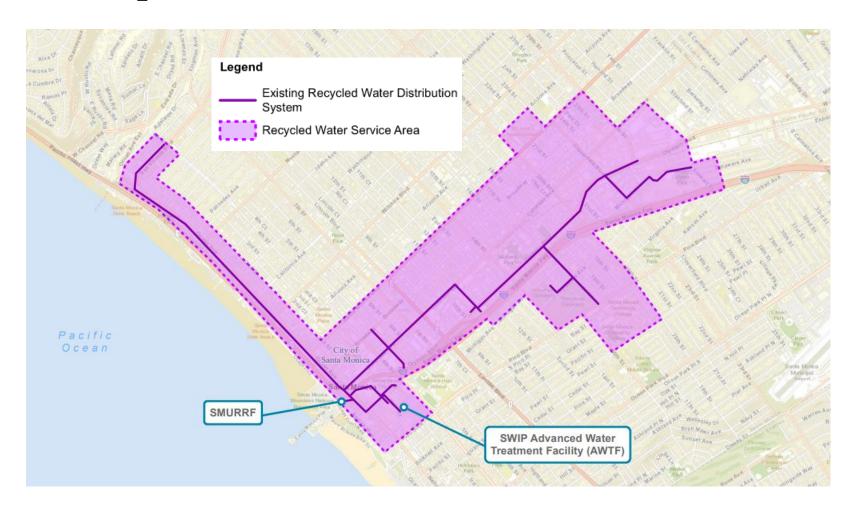


7.12.170.(c) - New Development Applicability

- Located within the recycled water service area, and
- Total floor area of **7,500 square feet** or more.



Recycled Water Service Area Map





7.12.170.(d) - Exemptions

- 1) Any exemptions recognized by the LACDPH
 - Dual-plumbing for single family homes including ADUs
 - Dual-plumbing for non-professionally managed apartments
 - Dual-plumbing for food service facilities
 - Site-specific limitations



7.12.170.(d) - Exemptions, continued

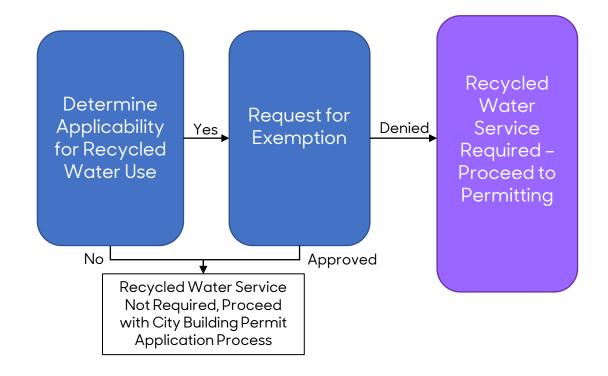
- 2) Fire protection systems unless allowed by LACDPH
- 3) Particular fixtures as approved by the Public Works Director (e.g., microchip processing)



7.12.170.(e)&(f) Permit Process

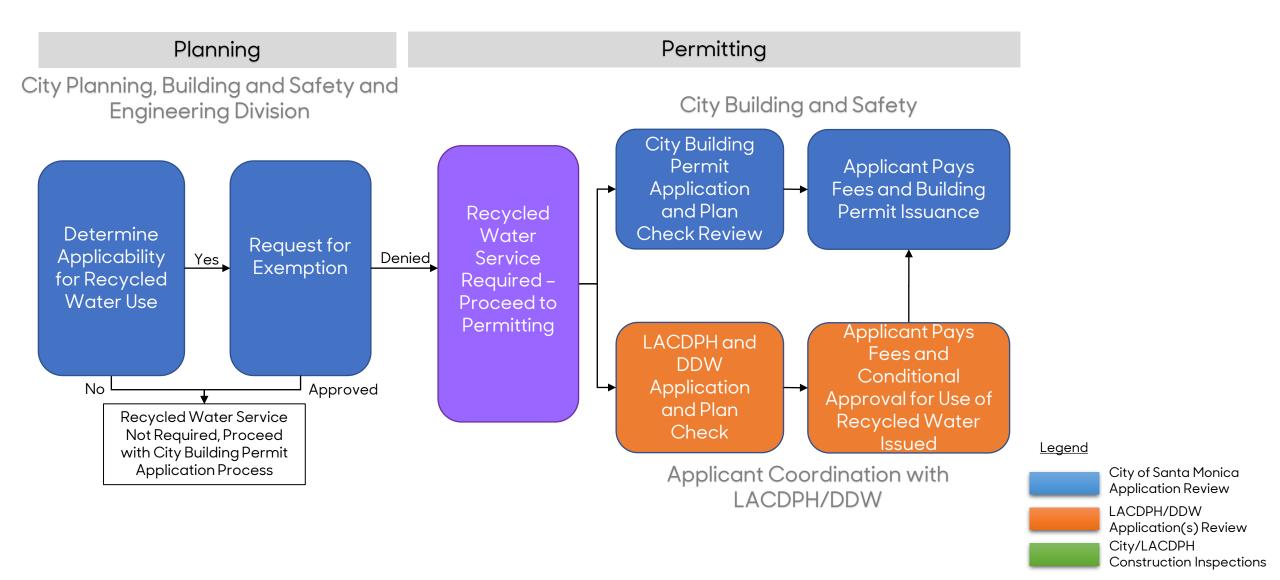
Planning

City Planning, Building and Safety and Engineering Division

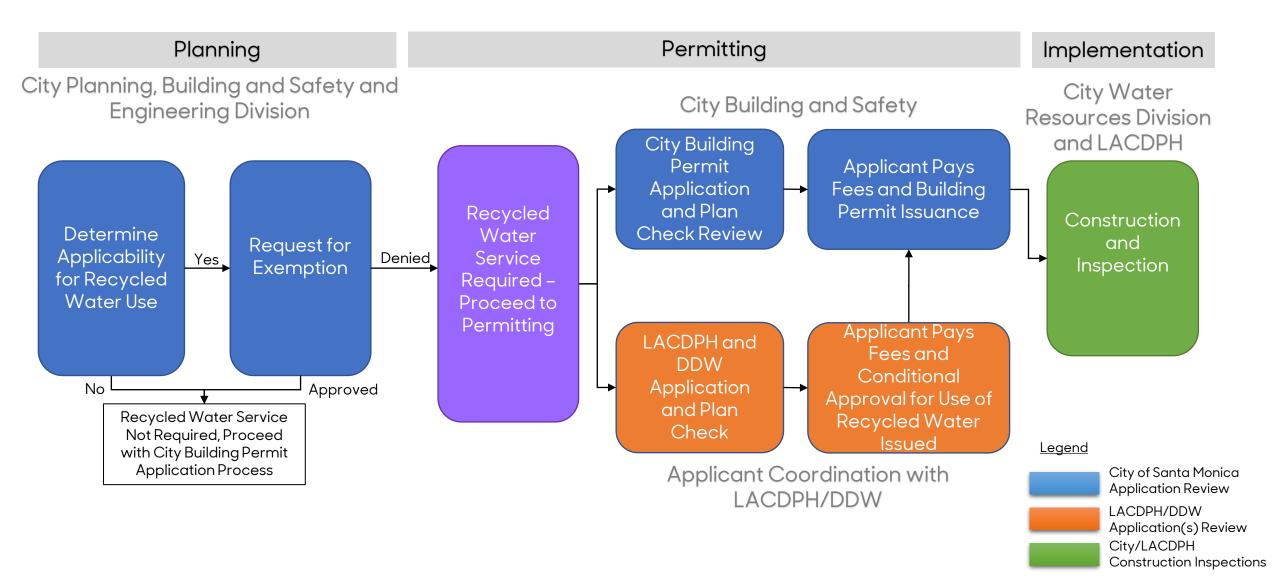




7.12.170.(e)&(f) Permit Process



7.12.170.(e)&(f) Permit Process



7.12.170.(e).1 - Recycled Water Use Guidelines, Policy, and Procedures

- Engineering Controls and Cross-Connection Prevention
- Monitoring and Inspections
- Recycled Water Site Supervisor and User's Responsibilities







Cost Impact to Developments

- Evaluate approximate cost to add recycled water for new developments
- Analysis based on various project types
 - Low-income housing
 - Multi-family/high-rise
 - Commercial
 - Mixed-use

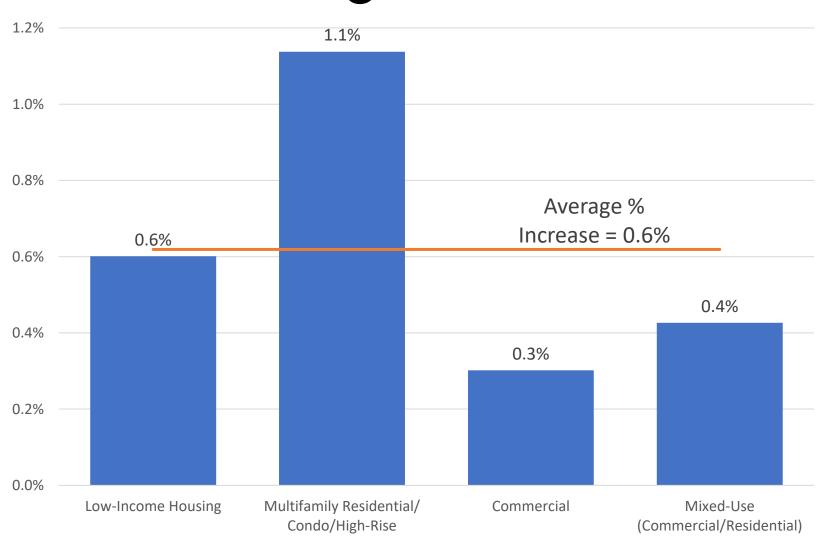


Capital Cost Impact Analysis – Example Project

- New Development Commercial
- Total escalated development cost = \$73,750,845
 - Total fixtures = 96
 - Total fixtures available to receive recycled water = 39
- Approximate cost to add recycled water = \$117,500
- 0.2% increase to total development cost



Total Building Cost Percent Increase for Dual-Plumbing





Capital Cost Impact Analysis - Summary

- Dual-plumbing:
 - Average increase of approximately \$3.50 per square foot
 - Less than 1% increase in total development cost
- Irrigation: nominal price impact



Key Takeaways for Ordinance

- 1. Regulatory requirement for SWIP
- 2. Minimal impact on total development cost
- 3. Most environmentally conscious option
 - a) Reduces imported potable water
 - b) Reduces total carbon footprint
 - c) Utilizes a drought-resilient resource
 - d) Promotes local supply and self-sufficiency



Recommendation

Support the proposed ordinance modifying SMMC Section 7.12.170 to add water recycling requirements in compliance with regulatory requirements for SWIP and to allow for a new sustainable water supply to service non-potable applications.





Sustainable Water Infrastructure Project (SWIP)



- Element 1
 - 1.5 MG Clean Beaches Tank
 - Improvements to Santa Monica Urban Runoff Recycling Facility (SMURRF)
- Element 2
 - New 1 MGD Advanced Water Treatment Facility (AWTF)
- Element 3
 - New 1.5 MG Civic Center Stormwater Harvesting Tank



SWIP's Multiple Benefits

- Creates ~1,600 AFY of local water supply for the City
- Improves beach water quality
- Provides EWMP/MS4 compliance
- Drought resilient water supply
- Diversifies City's water supply portfolio
- Increases recycled water production
- Augments local groundwater supply

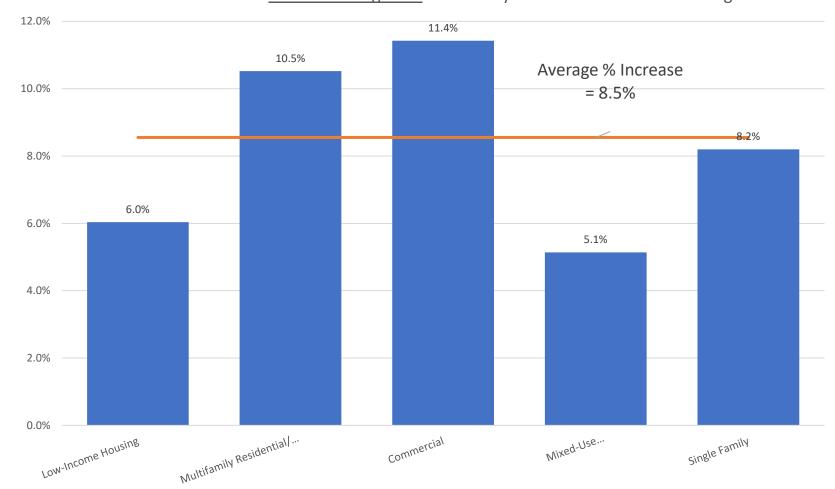


Key Project Dates and Timeline for SWIP

- Construction started January 27, 2020
- Construction 80% complete as of February 2022
- Regional Board adoption of the Conditional Permit for nonpotable reuse: Order No. R4-2021-0044 on February 11, 2021
- Delivery of advanced treated recycled water expected by Fall 2022
- In the process of permitting for groundwater replenishment operations

Capital Cost Impact for New Developments Implementing Dual-Plumbing

Percent Increase to Total Plumbing Cost to add Recycled Water for Dual Plumbing





Bi-Monthly Bill Savings FY22-23 100 Unit Multi Family

	Potable Water	Recycled Water
Water Usage – Irrigation and Dual- Plumbing (HCF)	230 (2.3 HCF per unit)	
Capacity Fee	\$27.33	\$0
Water Rate	2.3 HCF @ Tier 1 (0-8 HCF/unit) \$5.08 per HCF = \$1,168.40	2.3 HCF @ \$3.49 per HCF per unit = \$802.70
Total Bi-Monthly Bill	\$1,195.73	\$802.70
Total Annual Bill	\$7,174.38	\$4,816.20

Total Annual Savings ≈ \$2,360

